# **True Seven-Day Programmable Thermostats**

November 1998

The 1997 Washington State Nonresidential Energy Code requires that a true seven-day programmable thermostat be installed on mechanical systems in all commercial buildings (all occupancies other than Group Roccupancy). Specifically, Section 1412.4 requires the following:

HVAC systems shall be equipped with automatic controls capable of accomplishing a reduction of energy use through control setback or equipment shutdown during periods of non-use or alternate use of the spaces served by the system. The automatic controls shall have a minimum seven-day clock and be capable of being set for seven different day types per week.

#### Exceptions:

- 1. Systems serving areas which require continuous operation at the same temperature setpoint.
- 2. Equipment with full load demands of 2 kW (6,826 Btu/h) or less may be controlled by readily accessible manual off-hour controls.

To fulfill these requirements, the thermostat must have a seven day minimum clock mechanism capable of being set for seven different day types per week.

## Weekday-weekend (5-2) or Weekday-Saturday-Sunday (5-1-1) thermostats do not comply with these requirements.

To assist applicants, a list of acceptable thermostats has been compiled. All of the following thermostats are available at local retail outlets or can be ordered through local distributors. If you are unable to locate the product, call the manufacturer and they will provide the names of local sales outlets or sales representatives.

Several words of caution are in order about this list. First, the price range varies widely. Second, not all thermostats work with all space heating systems. For instance, heat pumps often require a special thermostat capable of staging the heating elements. Verify that the thermostat will work with your space heating system. Third, the products on this list are not necessarily the only acceptable products. This list will be revised as information is provided on other products.

### Information to be Included on Plans

- Provide note on drawing (not in specifications alone is not acceptable) stating that thermostat has automatic controls having a minimum seven-day clock and is capable of being set for seven different day types per week per Energy Code Section 1412.4.
- Provide manufacturer and model number for thermostat when available.
- Provide one thermostat for each zone per Energy Code Section 1412.1.

#### **Further Information**

For additional copies of this Client Assistance Memo or revised versions of it, contact the Seattle DCLU at 684-8850. All Client Assistance Memos are public domain documents and may be freely copied without any special permission.

For projects within the Seattle city limits, if you need further information on the 1997 Energy Code requirements and compliance process, contact the Seattle Department of Construction and Land Use at 684-7846 or 684-8860 between 1:00 p.m. and 4:15 p.m. or visit the Energy Code website at http:/ www.ci.seattle.wa.us/dclu/energy.

#### Manufacturer **Acceptable Products**

Honeywell, Inc. 9555 SE 36th St. Mercer Island, WA 98040 206-236-4042 www.honeywell.com

T7200; T7300; T7200 D,E Series 2000\*; T7300 D,E,F Series 2000\* PC8900\*; Chronotherm III T8611M, T8621M; Chronotherm IVT8600D\* T8601D\*, T8602D\*, T8611G\* T8624D' (but not T8600, T8601, T8602,

White-Rodgers 1F 84-51\*; 1F 87-51\*; 1F 94-71; 9797 Reavis Road St. Louis. MO 6312 314-577-1300

www.white-rodgers.com

1F 94-80; 1F 95-71; 1F 95-80; 1F 97-51. 1F 97-71: 1F 97-371\* (but **not** 1F 80-51, 1F82-51,

T8611A or T8611B).

1F 90-51, 1F 90-60, 1F 90-71 1F 90-371, 1F 91-71, 1F 92W-S1, 1F 92-71.)

<sup>\*</sup> Indicates that a product is new to this list.